

“Partners in Perfection”: Human Resources Facilitating Creation and Ongoing Implementation of Self-Managed Manufacturing Teams in a Small Medium Enterprise

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Small medium enterprises (SMEs) continue to grow, survive, and prosper throughout the world. Although the management of SMEs feel more positive and confident about their relationships with employees, they also continue to encounter a greater number of challenges than their larger multinational counterparts. These problems are inherent in their structure and predominantly emanate from human resources, outdated business models, and lack of strategic planning. Total Quality Management (TQM), long recognized as a major cultural change strategy for profitability and competitive edge, embraces the concept of total employee involvement in the form of teams. SMEs, however, have been slow to include employees in any ongoing collaborative work environment initiatives. Behind the shortage of sustained team formulation is uncertainty about its long-term durability, which can be directly related to lack of a continuing centralized organization and facilitation of the process itself. Human resources, often ineffectively used in SMEs, has the skills and knowledge to lead an ongoing breakthrough strategy of self-managed work teams in an effort to create a sustained high-performance work system. This article reviews the challenges human resource management faces in SMEs. The authors also present an example of how a human resource department led a lasting change management initiative of facilitating self-managed work teams throughout a manufacturing SME, which resulted in continuous and sustainable improvements in productivity, quality, turnover, absenteeism, health, on-time delivery, safety, and product design.

The small medium enterprise (SME) has between 10 and 249 employees (Wessel & Burcher, 2004), fewer than 200 employees (Sutton, 1989), or 500 employees or fewer for most manufacturing industries (Gumbus & Lussier, 2006; U.S. Small Business Administration Size Standards, 2008). Using the standard of 500 employees or fewer, we find that SMEs account for the majority of organizations (Culkin & Smith, 2000), constitute 95% of total enterprises in the world, and claim 66% of total employment and 55% of total production (Ozgulbas, Koyuncugil, & Yilmaz, 2006). SME productivity was the driving force in the U.S. economy for the past two decades (Kurato, Goodale, & Hornsby, 2001). Of the 5.7 million businesses in the United States, only 14,000 employ more than 500 workers (Chaston, Badger, & Sadler-Smith, 2000).

Because of their size, SMEs lack the capabilities, market power, and other resources of the traditional multinational enterprise (Knight, 2000). The larger organization is a stronger competitor than the SME; it has easier access to resources, greater market share, and economies of scale and scope. Although SMEs in general continue to survive, grow, prosper, and consistently increase their economic and societal role, they also encounter a variety of problems that are inherent in their management structure (Sutton, 1989), the principal of which lie within human resources (Hoover & Hoover, 1999). Labor shortages, retention, poorly trained human capital, competitive compensation practices, maintaining morale, and appraising performance are but a few of the issues that impede the progress and market growth of the SME (Carlson, Upton, & Seaman, 2006).

Good human resource practices produce such positive organizational outcomes as productivity increases, lower turnover, and enhanced performance (Arthur, 1994; Delaney & Huselid, 1996). SMEs experience challenges in these areas (Huang & Brown, 1999) because their size may not warrant bringing on professionals exclusively dedicated to human resource management activities (Hornsby & Kurato, 1990; Wagner, 1998). It is no wonder that the human resource function, especially in the SME, continues to be stereotyped into nonstrategic administrative roles such as coordinating training and employee relations events, picnics, holiday gatherings, service award ceremonies, communications on the order of a company newsletter, and ensuring team effectiveness (Federico & Thompson, 2007). The belief is human resources does not have a complete appreciation of the total business or the strategic business plan—which results in statements of the sort “HR people are not the sharpest tacks in the box” (Hammonds, 2006, p. 20).

Although the CEO of an SME is often the owner, majority shareholder, and key decision maker, strategic planning is limited (Huang, Soutar, & Brown, 2002). On the other hand, unlike larger organizations with huge bureaucracies, SMEs tend to be more entrepreneurial, flexible, innovative, and responsive to customer needs (Gilmore, Carson, O'Donnell, & Cummins,

1999; Wagner, 1998). Critical to the success of the SME is creation of a climate that embraces positive change (Duberley & Walley, 1995). Examples of employee-based strategies that can assist in this process are specialized training and education programs (Niehoff & Whitney-Bammerlin, 1995), employee involvement programs (Lawler, 1994), employee empowerment (Goodale, Koerner, & Roney, 1997), and continuous improvement quality management programs such as Six Sigma (Wessel & Burcher, 2004).

Managing Today

The traditional role of a manager—boss—has been redefined or even eliminated (Sims, 1994). Good management is working through others to accomplish tasks that help fulfill organizational objectives as efficiently as possible (Williams, 2008). Managers, though, have lost legitimacy over the past decade in the face of a wide breakdown of trust and self-policing (Khurana & Nohria, 2008). Today's competitive global environment demands leaders who are skilled in securing continuous and sustainable improvements in productivity, customer service, response time, cost reduction, intellectual capital, and quality. Management faces uncertainty in every sector of the economy, including global rivalries, government deregulation, and the accelerating pace of technology (Probst, 2004). Competition is not only within similar markets but also among global supply chains where quality takes precedence over all other criteria (Bandyopadhyay & Jenicke, 2007). Customers demand more quality and clear value for their money (Simms, 2005). Interactions between the customer and employee set the stage for overall satisfaction (Wangenheim, Evanschitzky, & Wunderlich, 2007). A goal of zero defects or 100% flawless performance during a customer encounter (Bitner, Booms, & Mohr, 1994) is now a necessity.

Management must also be sensitive to workplace diversity issues (Buttner, Lowe, & Billings-Harris, 2006; Hilde & Smet, 2007; Parry, 2006), multiple generations characterized by bewildering differences (Arsenault, 2004; Effron, Gandossy, & Goldsmith, 2003; Howe & Strauss, 2007; Wilson & Foltz, 2005), and creation of tension (Schramm, 2004) that shows up in every facet of the management-employee relationship, including long-term hiring and retention efforts (Holtz, 2007).

Management also is facing a fundamental deficit in practical preparation for recent graduates, and yet a very forgiving economy (Charlton, 2007). This includes lack of basic writing skills needed to communicate effectively (Ashton, 2007) and a definitive gap between what employers want and what graduates have been taught (Anonymous, 2004). Organizations have been forced to reeducate employees at an average annual training expenditure per employee in 2004 of \$955 (Tai, 2006), which increased to \$1,424 in 2005 (Ketter, 2006), resulting in expenditure of \$109.25 billion annually on workplace learning and performance.

Overall, management of SMEs faces daunting challenges. The key to their success is understanding change, preparing for it, and meeting it head on. Fostering a culture of creativity and collaboration is needed (Amabile & Khaire, 2008), and employees must be interdependent while also feeling they are in the know and need a workplace characterized by trust and team-work (Soupata, 2004).

In spite of the many trials noted, compared to their counterparts in larger organizations, management of SMEs report they experience fewer work-related problems, feel more positive about relationships with their direct reports and employees, demonstrate significant concern for both the task and people dimensions of their work, and are more confident in their own abilities (Moates & Kulonda, 1990). Many small organizations continue to work under outdated business models (Aquila, 2008), but the assets noted can easily become foundations for human resource managers to act as strategic business partners. Human resources is a prime candidate to lead long-term breakthrough initiatives such as self-managed work teams in an effort to promote the consistent and sustainable change needed to succeed.

Change

Although a normal part of organizational growth, change is unmanaged, unplanned, and often uncontrollable (Lycke, 2003). If the SME wishes to survive in the long run, it must have someone lead efforts to continuously improve, adapt to market demands, engage employees, and meet or exceed customer requirements.

Total Quality Management (TQM), long recognized as a major change strategy for competitive edge and long-term profitability, is best viewed as a management philosophy that combines a rich statistical toolkit, group problem-solving processes (Lawler, 1994), relentless attention to customer satisfaction (Beckett-Camarata, Camarata, & Barker, 1998; Rucci, Kim, & Quinn, 1998), process and value stream mapping (Grewal, 2008), defect-free products and service (Anonymous, 2006), along with creating a high-performance workplace able and willing to embrace change (Burk, 1997). The integrating concept in TQM is total employee involvement: participation and contributions from the shop floor to senior management (Dimitriadis, 2000). Without focused guidance and long-term supportive commitment, however, the process can become confusing to employees and they will fail.

The subcomponents of TQM emphasize the importance of management acting as the main driver of its activities. TQM is a culture, not just a program (Lawler, 1994). Management must facilitate continuous improvement of everything through enhanced horizontal and lateral relationships. This results in emphasis being placed on including all employees in every facet of the business. From Quality Circles to Self-Managing Work Teams, teamwork and quality have been closely linked in theory and practice (Cooney & Sohail,

2004). The durability of a team-based strategy, though, has received little attention. Most studies yield only a snapshot of teams at a particular point in time. Off-site training events that are fun and reportedly break down barriers between and among workers (Cooper, 2007) are often written about. The question becomes, "Is there an ongoing, long-term focused facilitation of teams and collaboration that occurs post training, thus transferring the learning and elevated spirit to employees' jobs?" If teams are durable, then their practices will become institutionalized within the firm and not just faddish managerial experimentation (Cooney & Sohal, 2004).

A quality culture must be ingrained into the very fabric of the business if lasting success is to be achieved (Folkerts, 2007). This occurs through development of teams, but major changes in the organizational structure to support collaborative team-based decision making, performance measurements, and group compensation systems are required (Anonymous, 2006). Sexton (1994) outlines general conditions of empowerment identified in effective implementation of teams:

- Proper training
- Shared vision
- Shared values
- Shared benefits
- Managerial faith in employees
- A culture that supports risk taking
- Self-selection of members for the team

Human resource departments of SMEs would need to strategically position themselves in an effort to centralize overall facilitation, creation, and ongoing monitoring of teams if lasting structural change is the goal.

Teams

Existing for hundreds of years and throughout many countries, teams are known to be more flexible than larger organizational groupings because they can be assembled quickly, deployed, refocused, and disbanded easily (Felts, 1995). One type of team configuration, self-managed work teams, is derived from the autonomous work group. Team members do not simply recommend, they do (Sexton, 1994). With critical stakeholders represented, self-managed work teams can create and coordinate their own activities, continuously communicate needed information, and improve performance on a variety of fronts (Gerwin, 1999). As quality initiatives evolved, so did self-managed work teams. Team members not only perform the work but are also involved in design and evaluation of the process itself (Attaran & Nguyen, 1999).

For a team that is referred to as self-managed or self-regulated, the one who emerges as team leader is the one who determines the overall purpose or

goal. However, then the team members are at liberty to manage the methods with which the members will achieve the goal, and at times establish objectives by which to achieve said goal. As a result of self-managed teams, management maintains the overall responsibility for the team's organizational context. This allows for team members to exhibit their potential for innovation and their ability to remain flexible for rapid change (Thompson, 2004).

Self-managed work teams are a direct outgrowth of sociotechnical systems theory (Sexton, 1994), a philosophy that supports the value of worker empowerment and focuses on products and customers (Attaran & Nguyen, 1999). By extending the range of worker activities, an organization can broaden its skill base and create more meaning at work. This also leads to more active involvement in higher-level decision making, resulting in more job satisfaction and increased performance (Dumphy & Bryant, 1996).

Self-managed teams have been linked to increases in productivity (Fredendall & Emery, 2003), competence (Kauffeld, 2006), customer service (Childs, 1997), more favorable work attitudes (Cordery, Mueller, & Smith, 1991), intrinsic motivation (Pearson, 1992), mental health, and voluntary employee turnover (Wall, Kemp, Jackson, & Clegg, 1986). There are multiple definitions for teams in organizational settings. Cohen and Bailey (1997) identified at least four types, of which the self-managed or self-directed work team is one empowered to make decisions formerly made by supervisors and managers.

Sexton (1994, p. 48) notes that "the self-managed work team is not a magic formula, nor a mechanism artificially imposed by management with guaranteed success." If consistently facilitated, teams will be an organized and integral part of the change process needed for implementation of the strategic business plan. Cultures that support self-managed work teams in essence are looking to:

- Create and continuously improve the quality of employee's work-life balance
- Build a work environment that seeks customer input and quickly responds to these needs
- Increase productivity and decrease nonvalue-added activities
- Decrease unacceptable employee behavior that has a negative effect on both the bottom line and the internal and external customer
- Decrease costs
- Create linkages among departments

According to DuBain (1996, pp. 196–197), there are four levels of responsibility for team empowerment:

The first of [these] levels is the lowest level of responsibility and authority. At this level the activities are arranged in increasing order of accountability and authority such as: maintaining organization within the group, cross

training one another, housekeeping, monitoring and repairing equipment, and scheduling production.

The second level starts with establishing responsibilities for quality, and continuous improvement in work methods, maintaining inventory of the needed supplies, customer contact, and the interviewing and hiring of other team members.

It is at the third level where [one finds] cross-functional teams; employees from various functions who for example are empowered to schedule their own vacations, choose team leaders, procure equipment and machinery, enhance productivity through process control and facility layout changes.

Budgeting begins at the fourth level which includes involvement with product modification and development, as well as team members appraising other team member's performance, self-imposed employee disciplinary processes, and compensation decisions. A process team responsible for new product development would qualify for level four. This fourth level requires top management and total organizational commitment.

In essence, if developed properly, nurtured, and maintained consistently, teams can be an essential part in first creating and then sustaining a high-performance workplace (Felts, 1995). Teams also confront uncertainty, complexity, competitive pressures, and a need for strategy formulation and implementation while integrating the efforts of key departments (Srivastava, Bartol, & Locke, 2006). Successful teams have a well-developed and defined vision, a charter, and strategic focus. Members have a complementary set of skills, to complete the tasks at hand. They integrate their goals with those of the whole organization, its mission, and its cultural values (Hyatt, 1998).

SMEs should not feel they can just jump into a team-based culture. It is critical that the management of an SME work together to develop and achieve a strategic business plan that includes creation, training, and ongoing facilitation of teams by human resources. This will take a combination of solid incentives and a teaching program to give employees the requisite skills needed for success (Fenn, 1996). The following is an example of an SME that with top management support and a consistent facilitation by human resources created a team-based culture. Teams over the ensuing years became self-managed and realized positive results that dropped to the bottom line.

The Company

For more than 75 years WI, Inc., has been a privately owned, leading designer, manufacturer, and marketer of audible, visual, and voice-action message products. Human beings need the help of signals to warn them of

emergency conditions, give directions for action, provide information, and indicate conditions of interest. WI, Inc., is an international supplier of these signals, relays, and voice message systems to the fire, security, and communication life safety markets. The products must meet high standards of performance, reliability, and quality, as well as international, national, and local codes.

The facility, an old, wood-floored, converted ketchup factory, consists of a variety of labor-intensive assembly lines, a warehouse, a paint shop, tool and die department, shipping and receiving docks, and research, development, and quality testing laboratories. Finance, sales, marketing, customer service, information services, production control, payroll, procurement, and human resources are also housed in the same building.

A multishift, multicultural operation, WI averages 350 associates of which 220 are in manufacturing and represented by a contractual bargaining unit. WI's nationwide and international presence has carved out an impressive market niche, especially with leading-edge products compliant with the Americans with Disabilities Act. As an SME, however, the organization feels the pressure of resource-rich multibillion-dollar competitors. Figure 1 shows WI's functional organizational chart.

The CEO and major stockholder is the grandson of the company's founder. He is a firm supporter of progressive employee relations programs and has advanced degrees in business, chemical engineering, and psychology. Early in his tenure, the CEO created a proactive strategic human resource function (People Services) that "sat at the table." One goal for this department was to create an environment of continuous improvement in productivity, quality management, customer delight, employee development, and collaboration between and among departments. The CEO's vision is to create a participatory, team-centered climate within the organization.

Partners in Perfection

WI's people services function developed a blueprint for a manufacturing team-based initiative named "Partners in Perfection" (PIP). The objective of PIP was to foster a variety of educational, employee relations, and team-based (Figure 2) opportunities for associates. They would have available the means to increase their competencies, confidence, internal and external customer satisfaction, common and individual skills, communication ability, product and process quality, health wellness, and earning ability. People Services wanted associates to progressively become more empowered to manage and direct their individual and work group activities, while connecting the market and customers' needs to their jobs. Expected results were increased market share; higher productivity; more engaged, productive, and satisfied employees; decreased turnover and absenteeism; and enhanced customer delight. Elsewhere most similar breakthrough initiatives fall short of expectations

Figure 1. Functional Organizational Chart, WI, Inc.

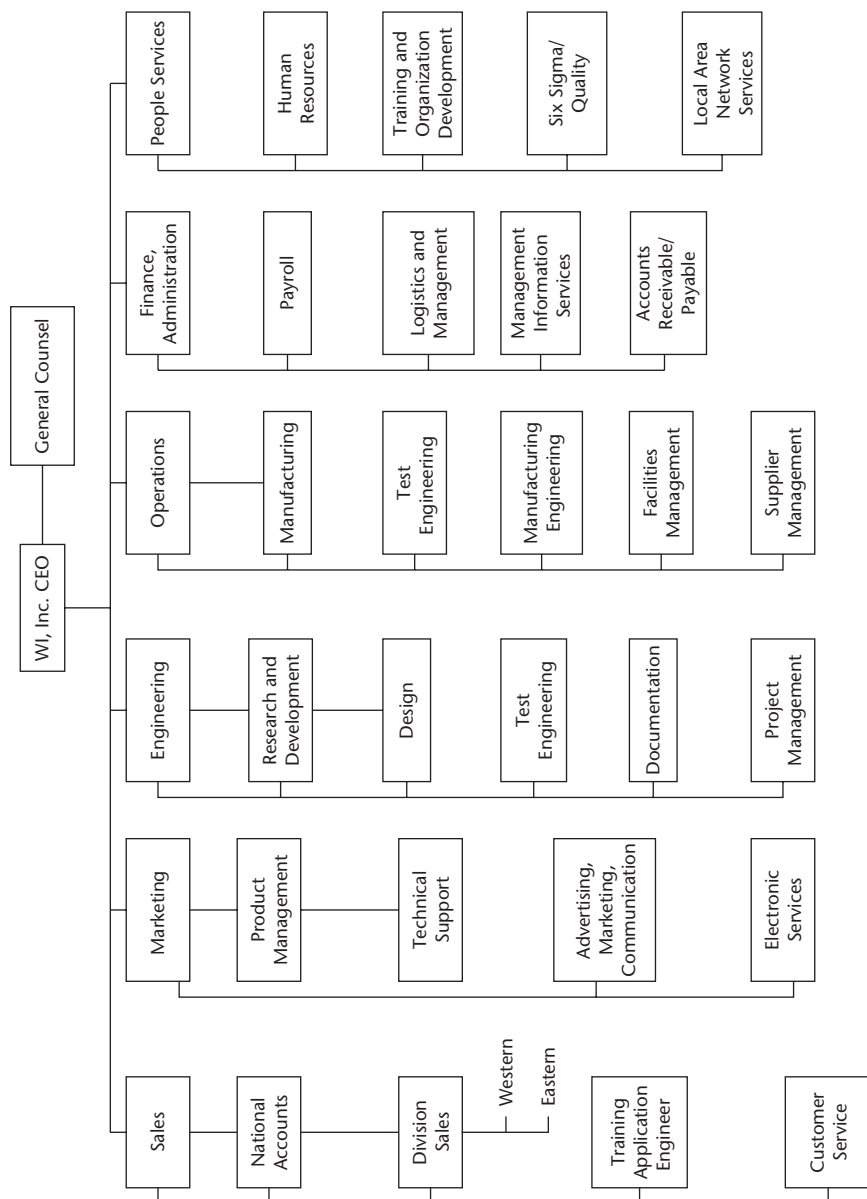
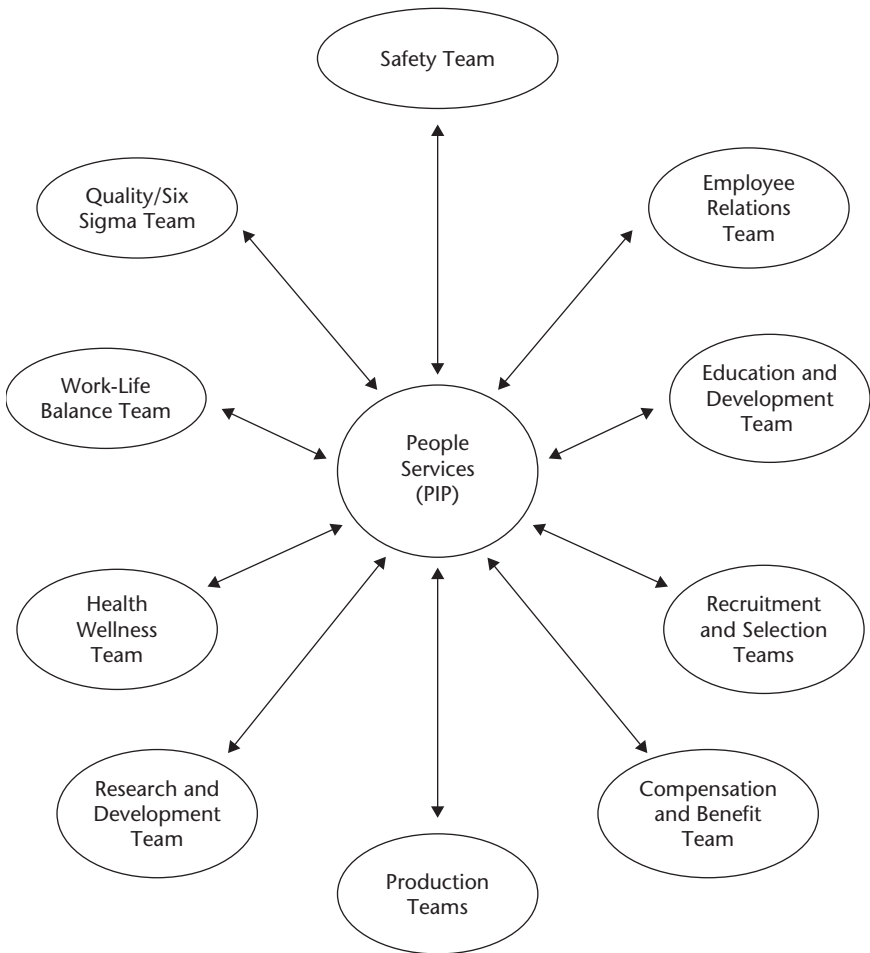


Figure 2. Partners in Perfection Model, with Human Resources Facilitating Ongoing Implementation and Management of Value-Added Teams



because of conflicting priorities and little long-term support or facilitation. Partners in Perfection became the responsibility of People Services. Appendix A depicts the resulting touch points and deliverables from the program's roll-out after three years.

Employee Relations

The first action was to bring all manufacturing associates together in small groups over a period of several weeks and ask two simple questions: "What's happening?" and "How can we collectively continuously improve?" These

meetings, held in the company cafeteria became known as the What's Happening meetings. Every associate in attendance was afforded the opportunity to express himself or herself in an open forum, without consequence, facilitated by the CEO and People Services. Feedback was recorded on flipcharts. Along with suggested actions of a "Get Well" plan provided by associates, the responses were posted on the walls for several weeks so that everyone could see the whole picture and not just that of their specific meeting. Associates were able to piggyback on any response through People Services.

Following the final meeting and any follow-up, People Services spent the next few weeks summarizing and creating themes. Other organizations might shy away from this model of employee participation because management feels such meetings as this are nothing more than "bitching and venting" sessions. People Services recognized this but also realized that with a structured approach the "purging" from associates would yield the rich information needed in order to be grounded for future planning. Themes showed that associates wanted to take part in the company's growth, be empowered to make or become part of decision making, collaborate, have a better balance of work and life, and continuously improve on products, processes, and customer service. They wanted products designed for manufacturability as well as decreased cost of benefits, ridding themselves of employees who are not pulling their weight, hiring motivated and energetic associates, and developing themselves. As several employees noted, "We want to become a part of a solution." This was their future. An equation for success resulting from the sessions with associates became the foundation of the PIP program:

Education + Self-managed teams + Empowered associates + Proactive leadership styles + Relentless attention to internal and external customers = Success, more money, and a better-quality work and family life balance

Organizing Teams

Teams were organized in a straightforward manner, either by assembly line or functional department (e.g., paint shop, maintenance, warehouse, shipping/receiving). As the teams formed most wanted identity, so they decided to attach names to their group: e.g., Bell's Belles, the assembly line team that produced the explosion proof, rugged and durable red bells often seen on walls of schools and other buildings to alert occupants in the event of an emergency; the Strobenators, the team that produced the very bright flashing light strobe visible in daylight or while sleeping often found in wall or ceiling building alerting devices. In total, 16 teams were created. The second shift also took part in the same manner.

Teams were required to meet formally, at a minimum every two weeks, initially facilitated by their supervisor or manager (advisor or coach). Each

team's first order of business was creation of an operating charter. For most associates, working in teams and attending meetings in this fashion was new and awkward at first. Expectations were that everyone in attendance would be engaged during meetings and contribute to the agenda's topics. Minutes of meetings were posted on bulletin boards and the company's intranet. Actions and deliverables followed discussion, to be reported on during their next meeting. For the first few months, it was evident that job knowledge and skills were adequate but group dynamics and team facilitation were competencies needing follow-up.

Training and Development. Shortly after the teams were agreed on, a corporate learning initiative was launched by People Services. The WI Enrichment Center was developed, based on a training needs analysis. Because one of the primary deliverables was ongoing involvement in, maintenance of, and facilitation of work teams, every associate had to attend the initial course offering, Introduction to Team Building, which lasted four days. On satisfactory completion, associates who showed interest in becoming a team leader or facilitator would also attend Advanced Team Building, which lasted another two days. Both classes became required courses in the company's new associate orientation program. During its first two years of operation, the Enrichment Center offered a curriculum of more than 35 courses (see Appendix B). Each department was required to budget a minimum of 40 hours of training per year for all associates. A curriculum guide listing and describing each course in detail was given to all existing and newly hired associates. Coaches and advisors could recommend that associates take specific classes, or associates themselves were able to register for classes. Registration had to be completed far enough in advance so manpower planning could take place in their absence from the team.

In an effort to develop the correct content for several classes, levels of proficiency were sought. In math and reading, for example, because quality management methods would shortly evolve and need elevated skills, it was necessary to determine a baseline of what WI had as skills in these areas. The SRA Arithmetic and SRA Reading Index were given; the results showed on average math proficiency was at the third-grade level and reading was at the fifth grade. Concerned that they would lose their jobs because of these depressed scores, a number of associates were assured that the purpose of the inventory was to develop a starting point for classes, not to dismiss anyone.

Owing to the enormity of the projected upcoming educational intervention, training grants were applied for and received from the State Department of Labor, Division of Customized Training. These grants over the years were in excess of \$2 million.

Recruitment and Selection. The goal of the PIP recruitment and selection process was to become an employer of choice and not an employer of last resort. A team-based interviewing process began where interested associates attended an on-site course, Interviewing 101. Any team that had an open requisition would meet, review applications, choose candidates to interview, and

develop appropriate questions. Representatives from the team and People Services prescreened applicants over the telephone and interviewed those who matched agreed-on criteria. On completion of the interview, the team sent along its recommendation to the department coach, advisor, and People Services with all supporting paperwork. Teams had to be comfortable with a new hire; ultimately they would be working alongside them. The final offer to a candidate was made by People Services and a team member from the interview process. Associates from various teams went to job fairs, and they also assisted in creating and holding open-house recruitment days. A referral bonus program was put into place for anyone internally recommending a candidate who was subsequently hired.

Compensation. People Services worked with associates and created additional team-based reward programs that could potentially increase compensation above their contractual salary scales. Ultimate rewards were guided by results in quality, productivity, customer delight, and attendance. A database was developed to receive the information needed to make decisions and provide feedback. First-, second-, and third-place teams were recognized monthly and financially rewarded at a companywide on-site gathering. The first place team would then be entered into a much larger yearly award program.

A gain sharing program was developed that followed contractually agreed standards of productivity and quality. The compensation rewards resulting from this were reflected in biweekly paychecks. A third incentive became known as the Big Wheel at WI program. Peers would nominate associates for recognition in quality, efficiency, safety, cleanliness, cost savings, helpfulness, learning, development, and coaching. The nominations were evaluated by a cross-functional committee that created guidelines. Winners were again recognized at a monthly company gathering where they were given movie tickets, dining or shopping certificates, or a half-day off with pay.

Safety. Loss prevention was approached by a team of plant associates, facilitated by People Services. WI's worker's compensation carrier held training sessions and made available materials and videos as follow-up reinforcement. A safety committee was formed and biweekly meetings took place, followed by a safety tour, machine and workstation evaluation, and personal protective equipment assessment. Written reports were shared with coaches and advisors regarding conditions found and recommendations for improvement. Recognition was given once a month to teams that either had no safety incidents or made significant progress in the area of safety and loss prevention.

Work/Family. People Services led a team that evaluated the need for programs in various areas of work-life balance. A series of parenting workshops were offered by experts from local colleges. An employee assistance program was contracted. Students at Work day took place, along with a yearly children's holiday festivity that included a visit from Santa and Mrs. Claus, a magician, and a variety of other entertainment. There was a series of workshops put together for families to attend (financial planning, relationship building, the

“sandwich generation,” and the like). During the summer months, WI held a company family picnic and at the end of the year a service award dinner and dance was organized for associates and their spouses or significant others. Recognition, rewards, and gifts were given to associates who had been with the company, in five-year increments. Although telecommuting is not an option in a manufacturing environment, flextime was successfully tried out. Coaches, advisors, and samples of other associates were able to take advantage of this benefit, especially during the summer months.

Health Wellness. A major challenge existed with the rising costs of health insurance premiums. People Services facilitated a team that evaluated the present health care benefits and wellness efforts of the overall company. Meetings were held with associates, surveys were distributed, and trends from claim data were analyzed. The results pointed toward recommendations for an aggressive health wellness initiative. Here is a small portion of what was voluntarily provided by associates:

Approximately 40% of plant associates did not have a private primary physician.

Approximately 60% of associates used the hospital emergency room for all ailments, even the common cold.

Associates were not renewing needed medications.

The last physical or wellness visit for more than 90% of associates was at time of hire.

Screenings for cancer, cholesterol, blood pressure, etc., were nonexistent.

Lifestyles, eating habits, and reports of stress were cause for alarm.

The resulting goal from the team was to decrease health care premiums, educate associates, and increase their attention to good health habits. A lunch-and-learn program was created that consisted of hour-long seminars on more than 26 topics (Appendix C). If interested, associates needed to register for these sessions so production could plan accordingly. They used their 30-minute lunch break and the company provided an additional 30 minutes for attendance.

Health and wellness fairs were held every six months for associates and their dependents. Health care professionals from surrounding hospitals and clinics were on hand to screen for blood pressure, cholesterol, weight, vision, hearing, and a variety of other critical areas. Health care professionals were also invited to tour the facility, observe work habits and conditions, and make recommendations for improvements.

Partners in Perfection: Results

The Partners in Perfection intervention yielded impressive results in little more than three years of an aggressive ongoing team orientation facilitated by People Services. Here are a few of the most critical outcomes:

- Employee productivity, determined on the basis of production standards, rose on average from 85% to 114%. This excluded any increases due to equipment and machinery changes.

Voluntary turnover went from 33% to less than 5%.

Absenteeism dropped from a daily average of 18% to 1%.

- Quality prior to final inspection jumped from approximately 86% to 99%.

On-time delivery went from 78% to 93%.

- There was no health care premium increase in year 3 and year 4, with an actual decrease in year 4 saving the company more than \$1 million.
- The worker's compensation experience modification ratio went from a high of 2.086 to .891, and subsequently the incurred cost was lowered by 4.68% and loss ratio by 9.93%.
- Sales increased by more than 35%.
- Associates were able to use basic statistical process control methods while collecting and analyzing production, defect, and process data.
- Applications for employment more than tripled.
- Assembly line associates and team leaders sat in and participated on new product design meetings. Designing for manufacturability resulted in a significantly faster product development cycle, from 76 process activities to 26.

The organization itself was recognized on numerous occasions nationally, statewide, and locally as leaders in creative and innovative human resource programs, economic development, workplace education, and human capital, by professional associations such as the Society for Human Resource Management, the John J. Heldrich Center for Workforce Development, and the New Jersey Business and Industry Association.

Implications for SME Human Resource Managers

Today's leadership is less about the power of one person and more about the collective wisdom of many (Ferrazzi & Gatti, 2007). Management must be willing to relinquish the long-held centralized power and authority they have and let workers venture out to create, take ownership of, and become part of functional teams. The end result becomes a transition from planning, organizing, staffing, influencing, and leading others in isolation to working more across functions, as described by Yukl and Becker (2006). The self-managed work team environment can become the foundation for a much stronger and more innovative corporation in today's globally competitive market (Felts, 1995). SMEs are particularly vulnerable to market pressure, competition, and human resource challenges. A focused long-term team-based culture facilitated and managed by human resources will assist any organization to continuously improve in a multitude of areas, internal and

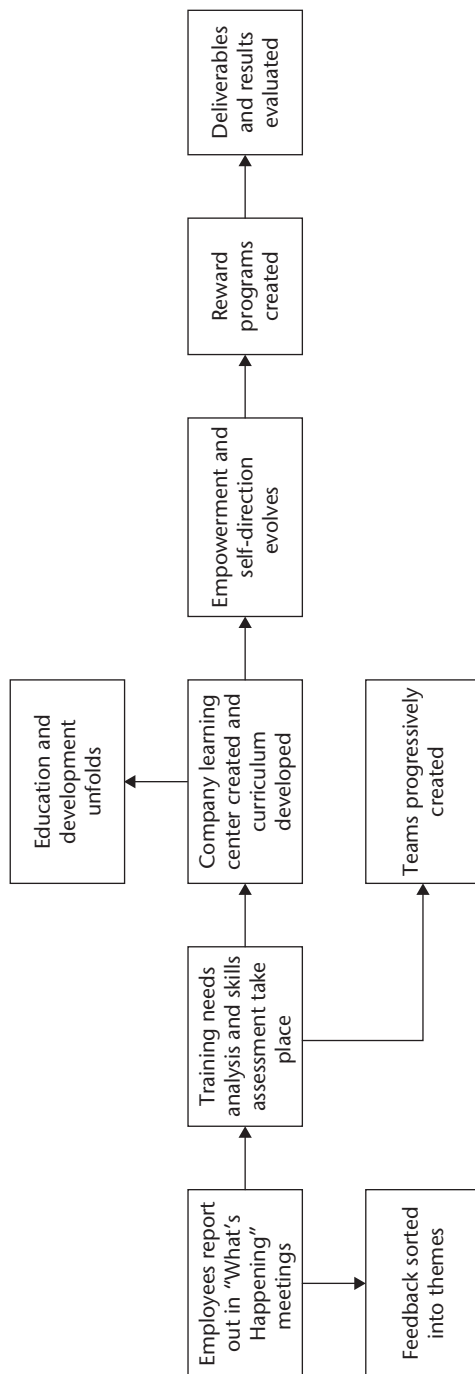
external. Human resources must establish itself as a strategic partner and show that it understands business strategy, speaks the language of business itself (Kleasen, 2007), and is able to make the cost-benefit connection between teams and bottom-line success. Human resources must prove that it is more than a myopic function of feel-good, employee relations activities and lagging indicators (Fazzari & Levitt, 2008).

In an excellent analysis of a predictive model of self-managing work team effectiveness, Cohen, Ledford, and Spreitzer (1996) found that group task design, group characteristics, and the employee involvement context are significant variables in team effectiveness. They note that a practitioner interested in designing effective self-managed work teams should focus first on enhancing the context for employee involvement; this had the strongest significant relationship with both quality of work life and manager ratings of performance. By nature and design, the self-managed work team calls for less intervention after the team is up and running. The more intervention by management, the greater the obstruction of increased performance and quality results.

Strategic breakthroughs in SMEs, such as a successful organization-wide ongoing team-building process, should not be considered if they are going to amount to a one-time event or a flavor of the month. Project-centered teams, of course, are different and are called on for specific time-framed activities. Premier and proactive HR departments correlate with highly successful organizations. A successful team-building process needs to be approached strategically. As a long-term model, people services would ideally become the centralized foundation from which all the teams will be organized and facilitated (Figure 3). The process should result in actionable events and ideas that help the teams and the organization achieve their strategic goals (Lantz, 2007). Continual learning, follow-up, action, and reinforcement are critical. Yet few, if any, human resource departments within the small medium enterprise operate in the capacity of a lead facilitator or organizer of an organization's total team-based approach over the long term. Investing in a consistent and ongoing value-added team-centered structure facilitated by human resource departments can improve an organization's overall employee relations, productivity, quality, and bottom line. The development and execution of an ongoing process of education, cross-functional intervention, employee development, and collaboration processes and programs is a natural fit for human resources. As Figure 3 depicts, the overall process is not a difficult one to unfold especially since the SME is by nature a more flexible, innovative, and responsive organization due to its limited bureaucracy. The overall result becomes a positive change in the climate and culture of the organization, its employees, and its bottom line.

Human resources in the SME continues to be a function that isn't effectively being used to help meet the major challenges facing these organizations: finding and recruiting talent, strategic HR measures, training and development,

Figure 3. Basic Flow of Evolvement of Self-Managed Work Teams



and compensation, to name a few (Smith, 2007). There is a relatively large unexplained area in the small business management literature on human resource management and labor relations; yet it is becoming increasingly more accepted that an organization's human resources are its major source of competitive advantage (Singh, Parker, & Nadim, 2007). High-performance work systems resulting in enhanced business performance are associated with high-involvement practices that include self-managed teams, sophisticated recruitment practices, reward and commitment practices, flexible working arrangements, and family-friendly programs. Human resources has always possessed the knowledge and skills to connect the dots across any silos that may exist in manufacturing SMEs, while creating a sustainable breakthrough initiative such as long-term self-managed work teams. It is increasingly more critical in a time of economic upheaval that solid change management leadership from human resources unfold. Developing a durable team-based culture facilitated by human resources may be central to finding the solutions to many of the challenges faced by management in the SME.

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Appendix A: Partners in Perfection Touch Points

After three years of roll-out the following touch points and deliverables were realized.

Teams consisted of between 5 and 16 associates. Teams were responsible for their own effective and efficient operation.

Teams monitored their own attendance, vacation time, illness-injury time, and personal time. No compromise to production schedules and quality was tolerated.

Teams recommended their own budgets consistent with WI's strategic plan and resulting goals. They monitored performance against their budget and adjusted accordingly.

Teams identified and sought out resources needed to ensure timely completion of work, training, and quality.

Teams met every two weeks with an agenda. Goals were set and agreed upon. Performance against those goals was monitored and reported to management.

Teams conducted themselves in a manner consistent with good human relation practices.

Teams worked with management on manpower planning. They became a part of the recruitment and selection process.

Teams had the authority to recommend disciplinary action upon a member according to the company's progressive discipline policies.

Teams were responsible for their own ongoing quality and product inspection.

Teams were responsible for the job assignments of members. They balanced resources—technical, financial, and human—to ensure success and continuous improvement.

Teams made certain that preventive maintenance of machinery and equipment took place on a consistent scheduled basis.

Teams made certain that above all else the safety of its members was paramount.

Teams were responsible for their own control of inventory and material handling.

Teams were responsible for defining, controlling, and continuously improving all successful and approved work processes and methods consistent with international standards and acceptable quality control practices.

Teams were responsible for their own scheduling and timely completion of work.

Teams identified their training needs and made the necessary arrangements to satisfactorily attain them.

Appendix B: Courses Offered at WI's Enrichment Center

Introduction to quality improvement
Phased process quality improvement
Improving work processes
Introduction to teambuilding
Advanced teambuilding
Goal setting
Interviewing
Budgeting and cost control
Conflict management
Communication skills
Problem solving
Basic math
English as a second language
Electronic soldering
Electronics theory
Blueprint reading
Component identification
Forklift operations
Back safety
Lock-out, tag-out
Blood pathogens
Harassment training
Workplace diversity
Material requirements through work orders
Graphing and data collection
Machine maintenance
Material handling
Planning and scheduling
Basic computer skills
Excel
PC fundamentals
PowerPoint
Basic supervision
Coaching
Six Sigma

Appendix C: Health and Wellness Lunch-and-Learn Seminars

Cancer prevention through nutrition
Watching our weight
Stress reduction
Exercise through chiropractic
Prenatal care
Nutrition to be fit
Body composition and analysis
The “sandwich generation”
Safety for the home
Stretching to feel better
Diabetes awareness
The health test
Breast self-examination
Testicular self-examination
Low back pain and how to prevent it
Your heart at work
Effective parenting
Latchkey children
Cancer awareness
Walking for exercise

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